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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,136	03/19/2004	Alvise Sartori	APV31683	6373

7590 01/23/2006

Stevens, Davis, Miller & Mosher, L.L.P.  
Suite 850  
1615 L Street, N.W.  
Washington, DC 20036

EXAMINER
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LUU, THANH X

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/804,136

Applicant(s)

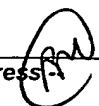
SARTORI ET AL.

Examiner

Thanh X. Luu

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address 

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,8,9 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8,9 and 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This Office Action is in response to amendments and remarks filed December 23, 2005. Claims 1, 4-6, 8, 9 and 12-19 are currently pending.

#### *Specification*

1. The abstract of the disclosure is objected to because it still uses unconventional terminology. Correction is required. See MPEP § 608.01(b).

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-6, 8, 9 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagihara (EP 1041818) in view of Merrill et al. (U.S. Patent 6,731,397).

Regarding claims 1, 4-6, 8 and 12-19, Hagihara discloses (see Fig. 40) a photosensitive reception means (PD), a current conversion circuit (T1, T3) and an amplification and reading circuit (T2, T5), wherein the current conversion circuit comprises a P-channel transistor (T3) that is able to put the photosensitive element into reset (initialization) and integration (accumulation of charge). Hagihara also discloses a second transistor (T1) coupled to the P-channel transistor as claimed to allow either a linear conversion or a logarithmic conversion of the photo-current. Further as understood, the second transistor is *able* to represent an active load, the device has an

inversely polarized N-type diode, the number of second transistors *can be* varied, and the photosensitive element is *able* to be integrated or be constituted in a cell or matrix of cell sensors as claimed. Hagihara does not specifically disclose the second transistor or the other transistors as being of the N-channel type or a reversal in conductivities of the transistors. Merrill et al. teach (see col. 6, lines 40-50) an electro-optical sensor in which N-channel type or P-channel type or a mix of N-channel and P-channel type transistors may be used as desired. Thus, Merrill et al. recognize that choosing the conductivities of the transistors in an electro-optical device requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide N-channel transistors or a reversal of transistor conductivities in the apparatus of Hagihara in view of Merrill et al. to obtain a more efficient circuit (combination of N-channel and P-channel transistors) as desired.

Regarding claim 9, Hagihara and Merrill et al. disclose the claimed invention as set forth above. Hagihara and Merrill et al. do not specifically disclose the response of the photosensitive element as claimed. However, the claimed response is well known and choosing the specific sensitivity and response of a photosensitive element requires only routine skill in the art. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to choose the claimed response in the apparatus of Hagihara in view of Merrill et al. to obtain a desired improved detection result.

### ***Response to Arguments***

4. Applicant's arguments with respect to the claims have been considered but are

moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu  
Primary Examiner  
Art Unit 2878

01/2006